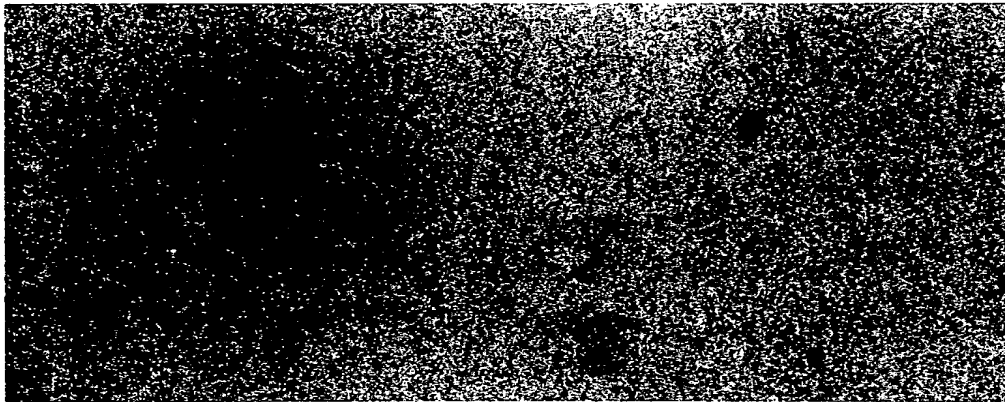


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12.5 day

14.5 day

16.5 day

18.5 day



FIG. I

1 GCCCTGCTTGTAGTGTTCACCAGATCGCAGCGCAAGAACCTGTTACATGAGATGCATGAG 60
61 CAGCTGGGCTCTGCAGAGGCTGCGGGAGCCGAGGGGTTCATGGCCAGCGCCGTGCGGCTCC 120
121 CAGACGCCGGGTCTTGGCTGCCCTCGCCCGGCCGCCGGCGGCGACGCACCGCCTTCGCCCA 180
A G S W L P S P G R R R R R T A F A S
181 GCCGTCACGGCAAGCGACATGGCAAGAGTCCAGGCTGCGCTGCAGCAGAAAGCCTCTGC 240
R H G K R H G K K S R L R C S R K P L H
241 ACGTGAATTTTAAGGAGTTAGGCTGGGACGACTGGATTATCGCGCCCTAGAGTACGAGG 300
V N F K E L G W D D W I I A P L E Y E A
301 CCTATCACTGCGAGGGCGTGTGCGACTTTCGCTGCGCTGCGACCTTGAGCCCACTAACC 360
Y H C E G V C D F P L R S H L E P T N H
361 ATGCCATCATTGAGACGCTGATGAACCTCCATGGACCCGGGCTCCACCCCGCCTAGCTGCT 420
A I I Q T L M N S M D P G S T P S C C
421 GCGTCCCAACCAACTGACTCCCATTAGCATCCTGTACATCGACGCGGGCAATAATGTAG 480
V P T K L T P I S I L Y I D A G N N V V
481 TCTACAAGCAGTATGAGGACATGGTGGTGGAGTCTCGGGCTGTAGGTAG 530
Y K Q Y E D M V V E S C G C R *

FIG. 2

GDF-6 AFASRHGKRHGKKSRLRCSRKPLHVNFKELGWDDWIIAPLEYEAYHCEGVCDFFPLRSHLEP---
 RPRRDAEPVLGGPGGACRRRLYVSF-REVGWHRWVIAPRGFLANYCQGQCALPVALSGSGGPP
 REKRQAKHKQRKRLKSSCKRHPLYVDF-SDVGWNDWIVAPPGYHAFYCHGECFFPLADHLNS---
 BMP-2 KRSQKHSQRARKKKNCRRHSLYVDF-SDVGWNDWIVAPPGYQAFYCHGDCFFPLADHLNS---
 BMP-4 SRGSGSDYNGSELKTACKKHLYVSF-QDLGWQDWIIAPKGYAANYCDGECFFPLNAHMA---
 Vgr-1 LRMANVAENSSDQRQACKKHLYVSF-RDLGWQDWIIAPEGYAANYCEGECAFLNSYMA---
 OP-1 SRMSSVGDYNTSEQQACKKHLYVSF-RDLGWQDWIIAPEGYAANYCDGECFFPLNAHMA---
 BMP-5 EQTLKKARKQWIEPRNCARRYLVDF-ADIGWSEWIIIPKSFDAAYCSGACQFPMPSKSKPS---
 BMP-3 GPGRAQRSAGATAADGPCALRELSVDL----RAERSVLIPETYQANNCCQGVCGWPQSDRNPRY---
 MIS ALRLLQRPPEEPAAHANCHRVALNISF-QELGWERWIVPPSFIHYCHGGCGLHIPPNLSLPV-
 Inhibin α HRRRRRGLECDGKV-NICCKQFFVSF-KDIGWNDWIIAPSGYHANYCEGECPSHIAGTSGSSL-
 Inhibin β HRIKRGLECDGRT-NLCRCRQFFIDF-RLIGWNDWIIAPTGYGYNYCEGCPAYLAGVPGSAS-
 Inhibin β HRRALDTNYCFSSSTEKNCCVRQLYIDFRKDLGWK-WIHEPKGYHANFCLGCPYIWSLD-----
 TGF- β 1 KKRALDAAYCFRNVDNCCLRPLYIDFKRDLGWK-WIHEPKGYNANFCAGACPYLWSSD-----
 TGF- β 2 KKRALDTNYCFRNLEENCCVRPLYIDFRQDLGWK-WWHEPKGYANFCSGCPYLRSD-----
 TGF- β 3

GDF-6 -TNHAI IQTLMS--MDPGSTPPSCQV--PTKLTPI SILYI-DAGNNVVYKQYEDMVVESGGCR
 ALNHAVLRALMHA--AAPGAADLPCQV--PARLSPI SVLFF-DNSDNVLRQYEDMVVDEGGCR
 BMP-1 -TNHAI VQTLVNS---VNSKIPKACQV--PTELSAI SMLYL-DENEKVLKNYQDMVVEGGCR
 BMP-2 -TNHAI VQTLVNS---VNSKIPKACQV--PTELSAI SMLYL-DEYDKVLKNYQDMVVEGGCR
 BMP-4 -TNHAI VQTLVNS---VNSKIPKACQV--PTELSAI SMLYL-DEYDKVLKNYQDMVVEGGCR
 Vgr-1 -TNHAI VQTLVHL--MNPEYVVKPCCA--PTKLNAI SVLYF-DDNSNVILKKYRNMVVRACGCH
 OP-1 -TNHAI VQTLVHL--MNPEYVVKPCCA--PTKLNAI SVLYF-DDNSNVILKKYRNMVVRACGCH
 BMP-5 -TNHAI VQTLVHL--MFPDHPVKPCCA--PTKLNAI SVLYF-DDSSNVILKKYRNMVVRACGCH
 BMP-3 --NHATI QSI VRA-VGVVPGIPEPCQV--PEKMSSLSILFF-DENKNVILKVPNMTVESACACR
 MIS -GNHVLL LKMQA--RGAALARPCCQV--PTAYAGKLLISLSEER--ISAHVPNMVATECGCR
 Inhibin α -PGAPPTPAQPS-----LLPGAQPCCAALPGTMRPLHVRTTSDGGYSFKYETVPNLLTQHACAI
 Inhibin β -SFHSTVINHYMRGHSFANLKSQV--PTKLRPMSMLY-DDGQNI IKKDIQNMIVEECGCS
 Inhibin β -SFHTAVVNQYMRGLNPGT-VNSCCI--PTKLSTMSMLYF-DDEYNIVKRDVPMNIVEECGCA
 TGF- β 1 -TQYSKVLALYNQ--HNPGASAAPCCQV--PQALEPLPIVY-VGRKPKV-EQLSNMIVRSQKCS
 TGF- β 2 -TQHSRVL SLNT--INPEASASPCQV--SQDLEPLTILYY-IGKTPKI-EQLSNMIVKSQKCS
 TGF- β 3 -TTHSTVLGLYNT--LNPEASASPCQV--PQDLEPLTILYY-VGRTPKV-EQLSNMIVKSQKCS

FIG. 3

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FIG. 4	GDF-1	100	33	50	46	44	48	35	27	42	43	46	47	46	34	23	37	35	33	TGF- β 3	33
	GDF-2	-	100	42	47	51	48	31	32	52	51	55	52	55	20	20	32	25	26	TGF- β 2	32
	GDF-3	-	-	100	49	49	46	41	33	53	50	53	50	50	22	25	42	41	36	TGF- β 1	33
	GDF-5	-	-	-	100	86	80	37	33	57	57	51	51	52	27	24	40	37	33	Inhibin β B	35
	GDF-6	-	-	-	-	100	80	38	34	57	56	53	53	54	26	27	43	39	35	Inhibin β A	37
	GDF-7	-	-	-	-	-	100	37	33	57	57	52	53	52	25	26	41	36	35	Inhibin α	23
	GDF-8	-	-	-	-	-	-	100	27	41	38	45	42	42	31	26	38	42	34	MIS	34
	GDF-9	-	-	-	-	-	-	-	100	33	34	31	30	31	21	27	30	31	23	BMP-3	42
	BMP-2	-	-	-	-	-	-	-	-	100	92	61	60	61	27	22	42	42	35	BMP-5	46
	BMP-4	-	-	-	-	-	-	-	-	-	100	60	58	59	27	22	41	42	34	OP-1	47
	Vgr-1	-	-	-	-	-	-	-	-	-	-	100	87	91	24	25	44	41	35	Vgr-1	46
	OP-1	-	-	-	-	-	-	-	-	-	-	-	100	88	27	24	43	42	34	BMP-4	43
	BMP-5	-	-	-	-	-	-	-	-	-	-	-	-	100	43	24	43	37	34	BMP-5	43
	BMP-3	-	-	-	-	-	-	-	-	-	-	-	-	-	100	30	36	37	32	BMP-3	100
	MIS	-	-	-	-	-	-	-	-	-	-	-	-	-	100	18	24	25	28	MIS	100
	Inhibin α	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100	26	25	23	Inhibin α	100
	Inhibin β A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100	63	41	Inhibin β A	100
	Inhibin β B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100	35	Inhibin β B	100
	TGF- β 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	TGF- β 1	100
	TGF- β 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	TGF- β 2	100
	TGF- β 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	TGF- β 3	100